

LOCAL GOVERNMENT ENERGY LOAN PROGRAM

Alabama Department of Economic and Community Affairs

Energy Division

LOCAL GOVERNMENT ENERGY LOAN PROGRAM

A PUBLIC/PRIVATE PARTNERSHIP OF THE

ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS

ENERGY DIVISION



Bill Johnson Director

Bob Riley Governor

and

ALABAMA ELECTRIC COOPERATIVE (PowerSouth)

Victor Wyatt Economic Development Funding Representative

Revised July 2008

TABLE OF CONTENTS

1.	Introduction	Page . 2
2.	Purpose	. 2
3.	Eligibility	. 3
4.	Benchmarking	. 3
5.	Energy Audits	. 3
6.	Eligible Energy Conservation Measures	. 4
7.	Program Highlights	. 4
8.	Definitions	. 6
9.	Program Contacts	. 7
10.	How to Apply	. 8
11.	Application for Eligibility Form10-	11
12.	Loan Application Form	12
13.	Energy Audit Form	14
14.	Portfolio Manager Start-Up Guide and Worksheet	19
15.	Annual Energy Usage Form	20

ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS Energy Division

LOCAL GOVERNMENT ENERGY LOAN PROGRAM

INTRODUCTION

Many government entities and school systems are faced with budget restraints and do not have funds to upgrade equipment and/or buildings for energy efficiency. In order to advance energy efficiency through local governments, the Energy Division of the Alabama Department of Economic and Community Affairs (ADECA) has established a revolving, low-cost energy loan program. Through a public/private partnership with PowerSouth (a wholly owned subsidiary of Alabama Electric Cooperative), the Local Government Energy Loan Program is available to local government entities and public school systems throughout the state of Alabama. All closing costs are included in the loan and it is anticipated that a local government or school system may repay the loan from energy cost savings, making these loans an attractive option for financing energy-efficient facility improvements.

PURPOSE

The Local Government Energy Loan Program enables government entities and school systems to receive a zero-interest loan for energy efficiency improvements, energy audits, and retrofits of buildings. The maximum amount of a loan is \$350,000 for governmental entities and up to \$350,000 per campus not to exceed \$500,000 per school system. This amount includes all closing costs. The loan interest rate is zero percent (0%). The interest rate will not be changed during the life of the loan. A three percent (3%) management fee is assessed for each approved loan.

ELIGIBILITY

Municipal and County governments and boards of education in Alabama are eligible.

CRITERIA

The criteria for participation in the Local Government Energy Loan Program are as follows:

- Buildings must be owned by the local government or school board applying for the loan.
- Buildings must include a heating system, cooling system, or both.
- Recipients must agree to repay the loan within ten years with regular interval payments throughout the loan period.
- The energy conservation measure must demonstrate a simple payback period of 10 years or less.
- Each energy conservation measure must have a useful life of at least equal to the estimated payback.
- Recipients shall warrant that all work or construction done with the proceeds of a loan under this program shall comply with all building codes and standards.

BENCHMARKING

Each building included in the project must be benchmarked using the ENERGY STAR Portfolio Manager program. A Start-Up Guide, Portfolio Manager Training and Preparation Worksheet is included in the application package.

ENERGY AUDITS

Each project will require an energy audit of the building or complex. The audit must identify and specify energy savings and related cost savings that are to be realized as a result of modifying operations and maintenance procedures, or by acquiring and installing one or more energy conservation measures. The energy auditor must be either 1) A registered Alabama engineer, 2) a person with training or experience in conducting commercial energy audits, or 3) a utility company representative. The cost of engineering may be included in the loan as a cost.

ELIGIBLE ENERGY CONSERVATION MEASURES

Energy efficiency conservation measures eligible under the Local Government Energy Loan Program include the following:

- Lighting retrofits
- Heat recovery systems*
- Load management systems
- Energy management systems
- Electrical distribution systems (motors, variable speed drives, fans, etc.)
- Infiltration reduction or other building envelope improvements
- Boiler efficiency and central plant improvements
- Upgrading water treatment plants for energy efficiency, energy recovery or both
- Heating, ventilating, and air conditioning (HVAC) equipment
- Renewable energy systems*
- Other cost effective energy retrofits as approved by the ADECA Energy Division.

*Heat recovery systems should be designed with a BTU meter to evaluate recovered energy continuously. Renewable energy systems will need a monitoring function to record energy produced by the system continuously.

PROGRAM HIGHLIGHTS

- Maximum loan amount is \$350,000 for municipal and county governments, \$350,000 per school campus not to exceed \$500,000 per school system (until the loan has been fully repaid).
- Term of loan is for ten years or less.
- Loans may be repaid at any time with no prepayment penalty.
- Applications for buildings and complexes must include an energy audit. Any eligible charges for an energy audit may be included in the loan amount.
- The borrower at the loan closing shall submit a Letter of Credit from a commercial bank or other form of security approved by the ADECA Energy Division. Any cost

associated with the Letter of Credit may be included in the cost of the loan.

- PowerSouth will charge the borrower a ten percent (10%) late fee for amounts due on all accounts that are not paid within 30 days of billings.
- Loan recipients must provide the ADECA Energy Division with an Annual Energy Usage Report containing 12 months of energy usage data before project improvements (as part of the Energy Audit) and the first twelve-month period following completion of the project. These reports can be generated using ENERGY STAR's Portfolio Manager program. If the affected project area is less than the metered area, an explanation of each must be included in the Energy Audit in order to facilitate the assessment of project performance over the life of the loan.

DEFINITIONS

Benchmarking – An energy management tool that tracks energy and water consumption of buildings.

Borrower - A participating unit of local government or school system that has been approved to receive a revolving loan under the Local Government Energy Loan Program.

Building - Any structure or facility owned by a unit of local government or school system.

Complex - Two or more buildings sharing an existing or proposed central heating/cooling, control system or utility energy metering system.

Energy Audits – A report that identifies and specifies energy savings and related cost savings that are likely to be realized as a result of modifying operations and maintenance procedures or by acquiring and installing one or more energy conservation measures in a building or complex. The Energy Audit must include at least 12 months of energy billing data and a breakdown of systems where annual energy is used categorically.

Energy Auditor – The energy auditor must be either 1) A registered Alabama engineer, 2) a person with training or experience in conducting commercial energy audits, or 3) a utility company representative.

Energy Conservation Measure - A commercially available energy efficient device, replacement or modification of an installation in a building or complex intended to reduce energy consumption or allow the use of an alternative energy source.

Interest – The current interest rate for the loan program zero percent (0%) for the life of the loan.

Payback Period - A numeric value derived from the total cost of energy conservation measures (including installation, equipment and engineering design) divided the estimated annual energy cost savings. The energy conservation measure must demonstrate a simple payback of 10 years or less.

Public/Private partnership - A joint financial venture between public and private entities for accomplishing a State goal. Under the partnership, each entity is responsible for implementing specified responsibilities according to the financial venture.

Renewable Energy – Resources that are naturally replenished in a relatively short period of time. They include biomass, hydropower, geothermal energy, wind energy, and solar energy.

Reporting Requirement - Each entity funded through the Local Government Energy Loan Program shall submit an Annual Energy Use Report on all projects within 60 days of the close of the 12-month period following completion of the project. Report should contain 12 months of energy usage data before project improvements and the first 12-month period

following completion of the project. A report form is provided in the application package, or one can be generated from ENERGY STAR's Portfolio Manager program. Annual reports will be required for the life of the loan.

Local Governments/County Governments and City/County Boards of Education School Systems - Eligible participants for the Local Government Energy Loan Program are Municipal and county governments, and city and county boards of education.

PROGRAM CONTACTS

For additional information on the Local Government Energy Loan Program, you may contact:

Karen Clifton, Program Manager ADECA Energy Division P. O. Box 5690 Montgomery, AL 36103-5690 Karen.Clifton@adeca.alabama.gov 1-800-392-8098

Victor Wyatt PowerSouth P. O. Box 550 Andalusia, AL 36420 victor.wyatt@powersouth.com (334) 427-3228

You may also contact your local electric cooperative.

HOW TO APPLY

- Step 1. Identify the building(s) and energy-using or energy-providing systems to be installed/implemented. Using ENERGY STAR's Portfolio Manager Program, calculate 12 months of energy/water consumption history and the energy intensity usage. These calculations determine the likelihood of energy savings potential.
- Step 2. Secure a copy of your organization's most recent certified financial statement.
- Step 3. Complete and mail the **Application for Eligibility** Form along with the **Portfolio Manager Report** and financial statements to:

Ms. Karen Clifton, LGELP Program Manager Alabama Department of Economic and Community Affairs Energy Division P. O. Box 5690 Montgomery, AL 36103-5690

- Step 4. ADECA Energy Division reviews the **Application for Eligibility** and notifies applicant of decision within two weeks.
- Step 5. Determine the availability of a Letter of Credit from a commercial bank or some other form of security for the loan that is acceptable to the ADECA Energy Division.
- Step 6. Have an energy audit performed by a qualified Energy Auditor of your choosing. If loan is approved the cost of the energy audit may be included in the loan. Use enclosed Energy Audit Form.
- Step 7. Complete and mail the **Loan Application** with **Energy Audit Form** to:

Ms. Karen Clifton, LGELP Program Manager Alabama Department of Economic and Community Affairs Energy Division P. O. Box 5690 Montgomery, AL 36103-5690

Step 8. You will be notified by the ADECA Energy Division of loan approval.

- Step 9. All energy improvements must be completed before loan closing.
- Step 10. A loan closing date will be set. You must present a Letter of Credit or other form of security approved by the ADECA Energy Division at the closing.
- Step 11. Applicant must notify the ADECA Energy Division of any proposed changes to planned improvements, problems during construction, delays or other deviations to proposed project.
- Step 12. Notify the ADECA Energy Division at least 30 days prior to project completion to schedule a monitoring visit by ADECA Energy Division staff.

Local Government Energy Loan Program APPLICATION FOR ELIGIBILITY FORM

(Note: make copies as needed)

Contact Person:		_Phor	e Number:	
Address:				
Street		City	State	Zip
Building(s) to be improved:	ESTIMATED COST		ESTIMATED SAVINGS	PAYBACK
A	\$		\$	Yrs.
В	\$		\$	Yrs.
C	\$		\$	Yrs.
D	\$		\$	Yrs.
Total	\$		\$	Yrs.
Are the buildings owned by the Signature of Authorized Officia			— Titl	e
FOR ADMINISTRATIVE USE	ONLY			
Approval of Audit, Application	Form, Payback:	YES _	NO OTHER	R
ADECA Energy Division Final	America VEC	NC	OTHER	

Page 2

Please complete the information requested below for each building listed on previous page.

A. BUILDING TO BE IMPROV	/ED:		
MEASURE DESCRIPTION:	EST. COST	EST. \$ SAVINGS	PAYBACK
1	\$	\$	yrs.
2	\$	\$	yrs.
3	\$	\$	yrs.
4	\$	\$	yrs.
Total	\$	\$	avg.
B. BUILDING TO BE IMPROV	/ED:		
MEASURE DESCRIPTION:	EST. COST	EST. \$ SAVINGS	PAYBACK
1	\$	\$	yrs.
2	\$	\$	yrs.
3	\$	\$	yrs.
4	\$		yrs.
Total	\$	\$	avg.
C. BUILDING TO BE IMPROV	/ED:		
MEASURE DESCRIPTION:	EST. COST	EST. \$ SAVINGS	PAYBACK
1	\$	\$	yrs.
2	\$	\$	yrs.
3	\$	\$	yrs.
4	\$	\$	yrs.
Total	\$	\$	avg.

Note: Make copies as needed.

Local Government Energy Loan Program LOAN APPLICATION FORM

(Note: make copies as needed)

Legal Applicant Name:	
Contact Person:	_ Phone Number:
Address:	
Address:Street	City State Zip
LOAN REQUEST 1. Acquisition of materials/equipment 2. Labor or installation costs 3. Energy audit charges/engineering 4. Loan processing & analysis Fee (3%) 5. Letter of Credit cost 6. TOTAL PROJECT COST (add 1-5) 7. Borrowers investment/capital	\$ \$ \$ \$ \$
8. TOTAL AMT REQUESTED (subtract 6-7 Letter of Credit available)
Copy of Energy Audit attached	YES NO
Estimated Project Start Date	
Estimated Project Completion Date	
List other planned renovations or additions to affect energy savings:	ouilding during the life of the loan that may
Signature of Authorized Official Date	Title
FOR ADMINISTRATIVE USE ONLY	
Approval of Audit, Application Form, Payback: ADECA Energy Division Final Approval: ves	

Local Government Energy Loan Program ENERGY AUDIT FORM

This form provides a preferred summary format for the Energy Audit that is required in the Local Government Energy Loan Program of the Alabama Department of Economic and Community Affairs' Energy Division. The audit consists of two parts: A. General Information and B. Energy Audit. An applicant must submit a separate audit for each building targeted for retrofit. Please complete ALL items on both pages, attach backup calculations, and return to the ADECA Energy Division at the address on the next page. If you have any questions contact the ADECA Energy Division, Karen Clifton at 1-800-392-8098.

PART A: GENERAL INFORMATION

Section A: Applicant and Building Information						
1. Applicant Name:						
2. Building Address:						
3. City:	4. State:	5. ZIF)			
6. Contact Person:	7.	Telephone:				
8. Building Type:(Select code from list :) a. Frame w/siding c. Concrete block d. Block w/brick e. Stone f. Concrete PIP g. Metal or Aluminum h. other	9. Approximate square Footage	Gross	Heated			
Section B: Energy Auditor Information Note: Energy Auditor must be either 1) A registered Alabama engineer, 2) a person with training or experience in conducting commercial energy audits, or 3) a utility company representative.						
1. Name:	2. Te	elephone:				
3. Firm or Organization:						
4. Mailing Address:						
5. City	6. State:	7. Zip:				
AL Professional License or Registration Number:		atement of Qualifi Energy Auditor.	cations for			
Section C: Certification The undersigned hereby certifies that the information presented in this audit is a true and accurate representation of the energy characteristics of the applicant's building or complex to the best of the energy auditor's knowledge.						
Energy Auditor's Signature and Title (Please	e type or print)	Date S	Signed			

PART B: ENERGY AUDIT

In	this sect	tion provid	le information	on the	propos	ed projec	t compa	ring it to	the curre	nt energy	usage
to	determi	ne energy	cost savings	and a	simple	payback.	Loans f	or recor	nmended	measures	s mus
be	e paid-off	within ter	n (10) years.								

1. Date Audit Performed:

- 2. Briefly, describe the **EXISTING** situation including the type of equipment and fuel that is used.
- 3. Describe the situation **AFTER** implementation of the energy conservation measures (ECM) recommended. Note: if the ECM saves more than 1 type of energy, show calculations for each type separately.
- 4. **Energy Conservation Measures (ECM) Summary.** (List the identified ECMs including estimated costs and savings for each.)

Energy Conservation Measures	Estimated Cost	Estimated Annual Savings (\$)	Simple Payback

5.	What is the estimated	date for	completion	of this	project?	
----	-----------------------	----------	------------	---------	----------	--

6 **Energy Savings Data.** Existing conditions vs. Recommended Changes (use whole numbers)

Fuel Type	Electricity		Natural Gas (cc ft)	LP Gas (Gal)	Annual Fuel Cost		
	(kW)	(kWh)	(55.5)	(
a. Existing		, ,					
b. Recommended							
c. Reduction							
d. Increase (or decrease) in maintenance costs resulting from this project: e. Estimated total cost of installing the recommendations: f. Overall Project Payback: / = years Total Project Cost Annual Savings Payback							

Return this form with the application to:

ADECA Energy Division

P.O. Box 5690

Montgomery, AL 36103-5690

ATTN: Karen Clifton

START UP GUIDE

Portfolio Manager Training Preparation Worksheet

Part A – Required Registration Information

Establishing a Portfolio Manager account is easy when you have all the information available to you during registration. This worksheet enables you to research and collect the data you will need, so that when you get on-line you will have it all together in one place. You should also file this sheet in an easily assessable place for future reference.

Go to the Portfolio Manager website

- In your web browser, type in: www.energystar.gov
- Click on "Buildings and Plants"
- On the right of the Buildings and Plants page under the heading "Quick Finder," click on "Portfolio Manager Login"
- When you get to the login page, look to the top right of the page and click on "New User? Register."

Complete your registration

1	- 11	lse	rn	2	m	۵	
	- U	50		~		-	

Select a name like your school district in all caps and no spaces, for example. (The username cannot have spaces, dashes, or other special characters.)

2	Passw	ord	•
~ .	เนออง	OIG	

Choose a password with 8 to 32 characters (letters and numbers only, no spaces)

_				
2	Fire	+ NI	am	^ :

(The name of the person who will be using the account the most.)

5. E-mail:

4. Last Name:

6. Title: (Your job title)

7. Organization:

(Local Government or School District name)

- 8. Address:
- 10. State:

9. City:

11. ZIP Code:
12. Phone:
13. Select a Verification Question: This is for obtaining the password if you lose it. Here are the options you will be given: What is your birth city? What is your favorite sports team? What is your favorite restaurant? What is the name of your pet? What is your favorite hobby? What is your favorite musical group? What was the make of your first car? What is your favorite movie?
14. Enter Answer:
15. What is the primary business or service of your organization? ("Local Government" or "Education")
16. Which best describes your job title? Choose from the following: Construction/Project Manager Energy Manager Energy/Environmental Manager Facility Owner/Developer Facility/Building/Property Manager Leasing Manager/Broker/Agent Physical Plant Manager Staff Architect/Space Planner/Designer Staff Engineer VP/Dir. Of Construction/Design/Engineer VP/Director of Facilities/Agent Other: (please specify)
(Most people select "Energy Manager" or "Facility Manager")
 17. Indicate your organization's annual activity for each category. You will need to know your total facilities' square footage. Manage/Upgrade: (use total facilities' SQFT) Own: (same as above)

18. You will not have to worry about the optional "Master Account Feature."

new facilities in design and construction)

Develop/Build: _____ (unless you know your capital improvement plan in terms of square footage, just use your best guess/estimate of the square footage of

Part B – Required Information for Each Facility Space

"Add a Property" Set Up

Click on "Add a Property."

When you set up your facilities in Portfolio Manager you will have to establish each building as a facility (or "property"). Information needed for each building includes the following:

- Facility Name:
- Address:
- City:
- State:
- County:
- ZIP Code:
- Year Built:

"Add a Space" Set Up

Once you set up the Facility, you need to "add a space." All schools will be entered as space type "K-12 Schools." A local government or an administration building should be entered as "Office" (you will see the prompt during the set up process). The "Effective Date" is the first date of the data you are entering (e.g. not the year of construction). Below is additional information required for each space.

1. Space Name:

This is an identifying name for the portion of the facility that you are defining (for example, K-12 School, East Wing, Vocational Module, etc.).

K-12 School applies to facility space used as a school building for Kindergarten through 12th grade students. This does not include college or university classroom facilities and laboratories, or vocational, technical, and trade schools. The total gross floor area should include all supporting functions such as administrative space, conference rooms, kitchens used by staff, lobbies, cafeterias, gymnasiums, auditoriums, laboratory classrooms, greenhouses, stairways, atria, elevator shafts, small landscaping sheds, storage areas, etc.

2. Gross Floor Area:

The total gross floor area is measured between the principal exterior surfaces of the enclosing fixed walls and includes all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc

Also note the following:

- Existing atriums should only include the base floor area that it occupies (such as in two-story buildings where the second floor area is simply open space).
- Covered walkways (solely protection from rain) should not be counted.
- Interstitial (plenum) space between floors should not be included in total.
- If you have portables that are on a separate meter, you don't have to include them in the count. If they are connected to the main meter with the rest of the structure, then you need to include the square footage.

3. Number of Workers or Students:

This is the total capacity the building is designed for. For instance, the number of students who can be seated in all classrooms at one time. This may also be referred to as the number of

stations, or the number of occupants that the facility was designed for. You only need to update this when you have a building addition, or you are adding portables that are connected to the main building utility meter.

[If this information is not known, you can use the default Value]

4. Number of PC's:

This indicates the total number of personal computers and servers in this space. This can be obtained by contacting the IT department or doing a couple of on site surveys to come up with an estimate. It should be accurate when you submit for an ENERGY STAR recognition opportunity.

[If this information is not known, you can use the default Value]

5. Operating Hours/Week:

This is the average number of hours per week that the facility is at least 50 percent occupied. For facilities with a schedule that varies during the year, "operating hours/week" refers to the total weekly hours for the schedule most often followed. Operating hours per week must be 30 or greater for K-12 schools, and must not be greater than 168.

[Default Value = 65 Hours per Week]

6. Are there on-site Cooking Facilities?

Yes or No

[Default Value = Yes]

7. What percent of this space is air-conditioned?

Choose percentage

[Default Value = 50%]

8. What percent of this space is heated?

Choose percentage

[Default Value = 100%]

9. How many months is this building in use?

This is the number of months out of the year that the building is open for use. To calculate an energy performance rating, this number cannot be less than 8 or greater than 12. [Default Value = 12]

10. Is this building mechanically ventilated?

Yes or No

This is the delivering of outside air to the space by using a mechanical system, such as central or window air conditioning unit, economizer, or variable air volume, etc.

[Default value = "Yes"]

"Add a Meter" Set Up

The last step in set up your portfolio to receive a rating is to add a meter and enter the utility data. Portfolio Manager lets you enter both water and energy meters, but only the energy meter data counts toward the rating.

1. Click on "Add a Meter"

You will first have to identify the meter by a name. Some people use a narrative description like "Main Meter." Others use the account number. And still others use the meter number. However, meters do get changed out from time to time, so that might not be the best option.

2. Add billing data

At this point you should have the bills handy that you want to enter into Portfolio Manager. Select the number of months that you will enter. To get a rating you need at least 12 months of data (utility bills) for each meter or account (such as with natural gas, fuel oil, LPG, etc.). Portfolio manager only requires the billing period and the number of units to obtain a rating. Cost data is optional but often desirable in order to run some of the analyses that Portfolio Manager can do.

3. Rating

Once you click "Save," you should be able to see a rating for the facility.

4. Report

After you've received your rating, request an <u>Energy Performance Report</u> by clicking on the link on the **My Portfolio** page. Make sure to include the Site Energy Intensity in your request. **This should be submitted with your application.**

ANNUAL ENERGY USE REPORT

This program requires that an Annual Energy Use Report be submitted on all projects within 60 days of the end of the 12-month period following completion the project. Provide 12 months of usage data prior to project improvements in the 'Before' category. The 'After' category should contain 12 months of energy usage after the project's completion. Indicate year for each category. A report should be submitted for each 12 month period during the life of the loan. You may either use this form or generate a report from Portfolio Manager.

Grantee (name, address, and specific building/project)					Month 1 "Before" (mm/yy)/ Month 1 "After" (mm/yy)/						
							Reporting Date				
		Electricity Demand(kW)		Electricity (kWh)		Electricity \$\$		Natural Gas(ccf)		Natural Gas \$\$	
Month	Before	After	Before	After	Before	After	Before	After	Before	After	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
TOTALS											
Energy Produced											
Comments: (P Signature of M			alterations/	additions th	at would aff	ect energy	usage or sa	avings rep	orted here)		

Continuation Sheet (if needed)

	Propane (Gal.)		Propane \$\$		Other (specify)		Other \$\$ (specify)	
Month	Before	After	Before	After	Before	After	Before	After
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
TOTALS								
Energy Produced								
Comments:								

Signature of Manager and Date





ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS

ENERGY DIVISION
P.O. BOX 5690
MONTGOMERY, ALABAMA 36103-5690
1-800-392-8098
www.adeca.alabama.gov/Energy
BILL JOHNSON, DIRECTOR

BOB RILEY, GOVERNOR